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On October 17, 2005

TOWNSEND and TOWNSEND and CREW LLP

By: Jennifer K. Hardin
Jennifer K. Hardin

PATENT
Attorney Docket No.: 014939-004800US



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Stephen E. Derenzo et al.

Application No.: 10/662,944

Filed: September 15, 2003

For: CODOPED DIRECT-GAP
SEMICONDUCTOR SCINTILLATORS

Customer No.: 20350

Examiner: Carol M. Koslow

Art Unit: 1755

Confirmation No.: 2024

**INFORMATION DISCLOSURE
STATEMENT UNDER 37 CFR §1.97 and
§1.98**

Mail Stop: AF
Commissioner for Patents
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Sir:

The references cited on attached form PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are enclosed.

It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

10/20/2005 MAHMED1 00000064 201430 10662944

02 FC:1806 180.00 DA

Appln. No. 10/662,944
IDS dated October 17, 2005

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

This IDS is being filed before the mailing date of the final Office Action or Notice of Allowance.

Please charge the IDS fee of \$180 to Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Babak Kusha
Reg. No. 51,095

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Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
Sheet	1	of	1	Application Number	10/662,944
				Filing Date	September 15, 2003
				First Named Inventor	Derenzo, Stephen E.
				Art Unit	1755
				Examiner Name	Carol M. Koslow
				Attorney Docket Number	014939-004800US

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ²
	AA	W. Lehman, entitled: "Edge Emission of <i>n</i> -Type Conducting ZnO and CdS", <i>Solid -State Electronics</i> , Pergamon Press 1966, Vol. 9, pp. 1107-1110		
	AB	W. Lehman, entitled: "Optical Absorption Edges of ZnO and CdS", <i>Journal of the Electrochemical Society</i> , November 1965, Vol. 112, No. 11, pp1150-1151		
	AC	D. Luckey, entitled "A Fast Inorganic Scintillator", <i>Nuclear Instruments and Methods</i> , Vol. 62 (1968), 119-120		
	AD	Ruiping Wang and Arthur W. Sleight, entitled: "High Conductivity in Gallium-Doped Zinc Oxide Powders", <i>Chem. Mater.</i> , 1996, Vol. 8, 433-439		
	AE	K. Thonke et al., entitled: "Donor-acceptor pair transitions in ZnO substrate material", <i>Physica B</i> , 308-310 (2001) 945-948		
	AF	S. B. Zhang et al., entitled: "Intrinsic <i>n</i> -type versus <i>p</i> -type doping asymmetry and the defect physics of ZnO", <i>Physical Review B</i> , Vol. 63, 075205		
	AG	P. J. Simpson et al., entitled "Superfast timing performance from ZnO scintillators", <i>Nuclear Instruments and Methods in Physics Research A</i> , Vol. 505 (2003), 82-84		

Examiner Signature		Date Considered
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¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

²Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

 <p>Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).</p> <p>FEE TRANSMITTAL For FY 2005</p> <p>OCT 19 2005</p> <p>Applicant Claims small entity status. See 37 CFR 1.27</p>		<p>Complete if Known</p> <table border="1"> <tr> <td>Application Number</td> <td>10/662,944</td> </tr> <tr> <td>Filing Date</td> <td>September 15, 2003</td> </tr> <tr> <td>First Named Inventor</td> <td>Derenz, Stephen E.</td> </tr> <tr> <td>Examiner Name</td> <td>Carol M. Koslow</td> </tr> <tr> <td>Art Unit</td> <td>1755</td> </tr> <tr> <td>Attorney Docket No.</td> <td>014939-004800US</td> </tr> </table>		Application Number	10/662,944	Filing Date	September 15, 2003	First Named Inventor	Derenz, Stephen E.	Examiner Name	Carol M. Koslow	Art Unit	1755	Attorney Docket No.	014939-004800US
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Attorney Docket No.	014939-004800US														
<p>TOTAL AMOUNT OF PAYMENT (\$ 180)</p>															

METHOD OF PAYMENT (check all that apply)

Check Credit Card Money Order None Other (please identify): _____

Deposit Account Deposit Account Number: 20-1430 Deposit Account Name: Townsend and Townsend and Crew LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

Charge fee(s) indicated below Charge fee(s) indicated below, except for the filing fee

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FEE CALCULATION**1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

<u>Application Type</u>	<u>FILING FEES</u>		<u>SEARCH FEES</u>		<u>EXAMINATION FEES</u>		
	<u>Small Entity</u>	<u>Fee (\$)</u>	<u>Small Entity</u>	<u>Fee (\$)</u>	<u>Small Entity</u>	<u>Fee (\$)</u>	<u>Fees Paid (\$)</u>
Utility	300	150	500	250	200	100	_____
Design	200	100	100	50	130	65	_____
Plant	200	100	300	150	160	80	_____
Reissue	300	150	500	250	600	300	_____
Provisional	200	100	0	0	0	0	_____

2. EXCESS CLAIM FEES**Fee Description**

Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent
Multiple dependent claims

<u>Total Claims</u>	<u>Extra Claims</u>	<u>Fee (\$)</u>	<u>Fee Paid (\$)</u>	<u>Multiple Dependent Claims</u>	<u>Small Entity</u>
-20 or HP = _____ x _____ = _____			Fee (\$)		

HP = highest number of total claims paid for, if greater than 20

<u>Indep. Claims</u>	<u>Extra Claims</u>	<u>Fee (\$)</u>	<u>Fee Paid (\$)</u>	<u>Multiple Dependent Claims</u>	<u>Fee (\$)</u>	<u>Fee Paid (\$)</u>
_____	-3 or HP = _____ x _____ = _____	_____	_____	_____	_____	_____

HP = highest number of independent claims paid for, if greater than 3

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

<u>Total Sheets</u>	<u>Extra Sheets</u>	<u>Number of each additional 50 or fraction thereof</u>	<u>Fee (\$)</u>	<u>Fee Paid (\$)</u>
_____	- 100 = _____ / 50 = _____ (round up to a whole number)	_____ x _____ = _____	_____	_____

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other: Submission of Information Disclosure Stmt 180

SUBMITTED BY

Signature	<i>Babak Kusha</i>	Registration No. 51,095 (Attorney/Agent)	Telephone 925-472-5000
Name (Print/Type)	Babak Kusha		Date 10/17/05